CARR-1586
Patapsco State Park, Sykesville vicinity

Summary:

The Elba Iron Furnace was constructed c.1847 by three Baltimore businessmen, Eben Belknap, John Griffiths, and Ammon Cate. In 1849, Isaac Tyson, Jr. purchased the furnace and approximately 15 acres of land for $10,000 for his son James Wood Tyson. Tyson also purchased dam and water rights from James Sykes, who had a mill in the vicinity. These rights would prove to be a source, as James' wife Elizabeth Tyson noted in a letter of 1851: "The country is parched for want of rain; the river is very low, so that the furnace has to stop for two or three hours every evening after old Sykes shuts his dam off until it spills and runs over. He built a dam against all James could do who told him it was not legal and now I am only waiting to feel a decisive inconvenience from it and will sue him."

Survey No. CARR-1586

MARYLAND INVENTORY OF HISTORIC PROPERTIES

Maryland Historical Trust
State Historic Sites Inventory Form

Magi No.

DOE __yes __no

1. Name (indicate preferred name)

historic: Elba Furnace

and/or common:

2. Location

street & number: Between CSX Railroad tracks & Patapsco River ___ not for publication

city, town: Sykesville X vicinity of congressional district:

state: Maryland county: Carroll

3. Classification

Category	Ownership	Status	Present Use	
___ district	X public	___ occupied	___ agriculture	___ museum
___ building(s)	___ private	X unoccupied	___ commercial	X park
X structure	___ both	___ work in progress	___ educational	___ private residence
___ site	**Public Acquisition**	**Accessible**	___ entertainment	___ religious
___ object	___ in process	X yes: restricted	___ government	___ scientific
	___ being considered	___ yes: unrestricted	___ industrial	___ transportation
	X not applicable	___ no	___ military	___ other:

4. Owner of Property (give names and mailing addresses of all owners)

name: State of Maryland, Department of Natural Resources

street & number: telephone no.:

city, town: state and zip code Maryland

5. Location of Legal Description

courthouse, registry of deeds, etc.: Courthouse Annex liber 292

street & number: 55 North Court Street folio 380

city, town: Westminster state: Maryland

6. Representation in Existing Historical Surveys

title: None

date: ___ federal ___ state ___ county ___ local

depository for survey records:

city, town: state:

7. Description

Survey No. CARR-1586

Condition		Check one	Check one
___ excellent	___ deteriorated	_X_ unaltered	_X_ original site
___ good	_X_ ruins	___ altered	___ moved date of move _____
___ fair	___ unexposed		

Prepare both a summary paragraph and a general description of the resource and its various elements as it exists today.

SEE ATTACHED

8. Significance

Survey No. CARR-1586

Period	Areas of Significance—Check and justify below				
___ prehistoric	___ archeology-prehistoric	___ community planning	___ landscape architecture	___ religion	
___ 1400–1499	___ archeology-historic	___ conservation	___ law	___ science	
___ 1500–1599	___ agriculture	___ economics	___ literature	___ sculpture	
___ 1600–1699	___ architecture	___ education	___ military	___ social/ humanitarian	
___ 1700–1799	___ art	___ engineering	___ music	___ theater	
_X_ 1800–1899	___ commerce	_X_ exploration/settlement	___ philosophy	___ transportation	
___ 1900–	___ communications	___ industry	___ politics/government	___ other (specify)	
		___ invention			

Specific dates C.1847 **Builder/Architect**

check: Applicable Criteria: __A __B _X_C __D
and/or
Applicable Exception: __A __B __C __D __E __F __G

Level of Significance: __national __state _X_local

Prepare both a summary paragraph of significance and a general statement of history and support.

SEE ATTACHED

9. Major Bibliographical References

Survey No. CARR-1586

SEE ATTACHED

10. Geographical Data

Acreage of nominated property _____

Quadrangle name Sykesville **Quadrangle scale** 1:24000

UTM **References** do NOT complete UTM references

		Zone	Easting	Northing
A				
B				
C				
D				
E				
F				
G				
H				

Verbal boundary description and justification

List all states and counties for properties overlapping state or county boundaries

state	**code**	**county**	**code**
state	**code**	**county**	**code**

11. Form Prepared By

name/title Kenneth M. Short, Historic Planner

organization Carroll County Planning & Develop. **date** May 25, 1999

street & number 225 North Center Street **telephone** (410) 386-2145

city or town Westminster **state** Maryland

The Maryland Historic Sites Inventory was officially created by an Act of the Maryland Legislature to be found in the Annotated Code of Maryland, Article 41, Section 181 KA, 1974 supplement.

The survey and inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

return to: Maryland Historical Trust
Shaw House
21 State Circle
Annapolis, Maryland 21401
(301) 269-2438

Elbe Furnace is located 3/4 of a mile southeast of Main Street, Sykesville, in Southeastern Carroll County Maryland. The furnace is located on the northside of the Patapsco river, between the river and the scx railroad tracks. The river is about 60' south of the furnace and sweeps in an arch around the site. River road runs on the south side of the river, the tracks are approximately 45' north of the furnace. The furnace is oriented facing southeast with a bank on the northwest. The large stones appear to be dry laid and are quarried containing many signs of drill marks. The structure is constructed primarily of large ashlar stones with some small stone infill. The interior of the stone wall is of smaller stones and the furnace has a lining of witch shaped fire bricks that are 10" long 3" high and are 5 ½ wide at the wide end and 4 ½ wide at the narrow end. The ground level is now much higher, it has been raised in part by the collapse of stones from the top of the structure.

The southeast elevation has a corbeled opening in the center that is 4' 5 ½ wide and at least 5'x 4½ high. The southwest elevation also has a corbeled opening in the center, but it is much lower than that on the southeast. There is an iron strap with an eye on the end projecting from the wall just south of the opening. The northwest elevation also has a corbeled opening about the same height as the southwest opening, this opening is 2' x 9 ¼ wide at the top but the opening is splayed so that it is wider at the base. This splay is in part due to the fact that all four walls of the furnace are battered. On the northeast elevation there is a great deal of collapse and it is not possible to tell if there is an opening here. There is a banked ramp of earth on the northwest side of the furnace that runs off to the northwest, there the remains of a stone wall on the northwest with a short section of it on the northeast. The northwest elevation was 21' x 8 ½ inches where it was measured 5' 2" above the ground level. The ground level was determined at the north corner where the structure survives in the best condition, and this is probably close to the original ground level or slightly higher. The surviving structure at the north corner is 16' 8 ¼ inches tall approximately. This is probably close to the original height. The walls batter in about 1 inch in every foot. The southwest elevation was measured to be 21' 8" wide at the same height of 5' 2". This measurement was not exact because one corner is collapsed. The interior of the structure is 8' 8 ½ in diameter from the outside of the brick to the outside of the brick on the opposite side. The lining is one brick thick with the narrow ends set to the inner side and there is a thick brown parging on the outer side of the bricks. There is a gap between the stone wall and the brick lining of 18 ½ to 20 ½ inches. The brown parging is approximately 5" thick, the interior appears to taper in as it goes up to the top.

About 100 or so yards upstream is a coursed stone wall along the bank of the river, this wall was at least 100' long and appears to have been constructed with the furnace to protect the furnace area from flooding. To the north of this stone wall is another stone wall along what appears to be a ramp that runs up to the northwest and then turns back to the southeast. About 150' yards or so further upstream is a portion of a dry laid stone wall of fairly large stones, this wall is about 10 to 15' south of the railroad tracks. There is no distinguishing features to determine its original function.

Contributing Resources 3

The Elba Iron Furnace was constructed c.1847 by three Baltimore businessmen, Eben Belknap, John Griffiths, and Ammon Cate. In 1849, Isaac Tyson, Jr. purchased the furnace and approximately 15 acres of land for $10,000 for his son James Wood Tyson. Tyson also purchased dam and water rights from James Sykes, who had a mill in the vicinity. These rights would prove to be a source, as James' wife Elizabeth Tyson noted in a letter of 1851: "The country is parched for want of rain; the river is very low, so that the furnace has to stop for two or three hours every evening after old Sykes shuts his dam off until it spills and runs over. He built a dam against all James could do who told him it was not legal and now I am only waiting to feel a decisive inconvenience from it and will sue him."

Tyson had apparently researched the costs and performance of a number of Maryland furnaces and estimated that Elba could produce iron at $20 a ton, delivered to Baltimore. Later refinements brought the cost down to between $17.50 and $18.16 a ton, depending on where the iron ore was acquired. Ores were used from George Patterson's Springfield estate, from the Clary ore bank Mt. Airy, from the Rice ore bank in Howard County, and from the Jalbot ore bank near Relay, which was a carbonate ore that was somewhat self-fluxing. At that time, December 1847, the single furnace had a 7 ½ foot diameter bosh with three tuyeres and produced 30 tons a week. In 1859, the furnace was reported to be 30 feet high, with an 8 ½ foot inside diameter. It burned charcoal, though there were reportedly experiments using anthracite coal, and operated both on water and steam power. It was considered to be an efficient hot blast furnace and was rated, in 1857, at 1,500 tons per year. In 1850, most of the labor was from Ireland, and some of it was from Germany. By 1860, most workers were natives of Maryland, with a few from Pennsylvania or Virginia. The July, 1868 flood that destroyed most of Sykesville also wiped out the Elba Furnace shortly after its blast had been blown out, and it was never rebuilt.

At present, much of a stone wall along the shore line of the site survives. The Patapsco River makes an arc to the south, forming a spit of land on which the furnace was constructed. This wall was probably intended to protect the site from typical flooding. The furnace stack survives in part, with portions of a stone wall to the north of the stack. There is sloping ground to the west that is probably a man-made earthen ramp for pushing wheelbarrows of ore, limestone, and charcoal up to the top of the furnace. There is also a stone foundation northwest of the furnace, but it is not possible to tell what it may have originally been. The site is scattered with slag and is now overgrown, which probably conceals other historic landscape features.

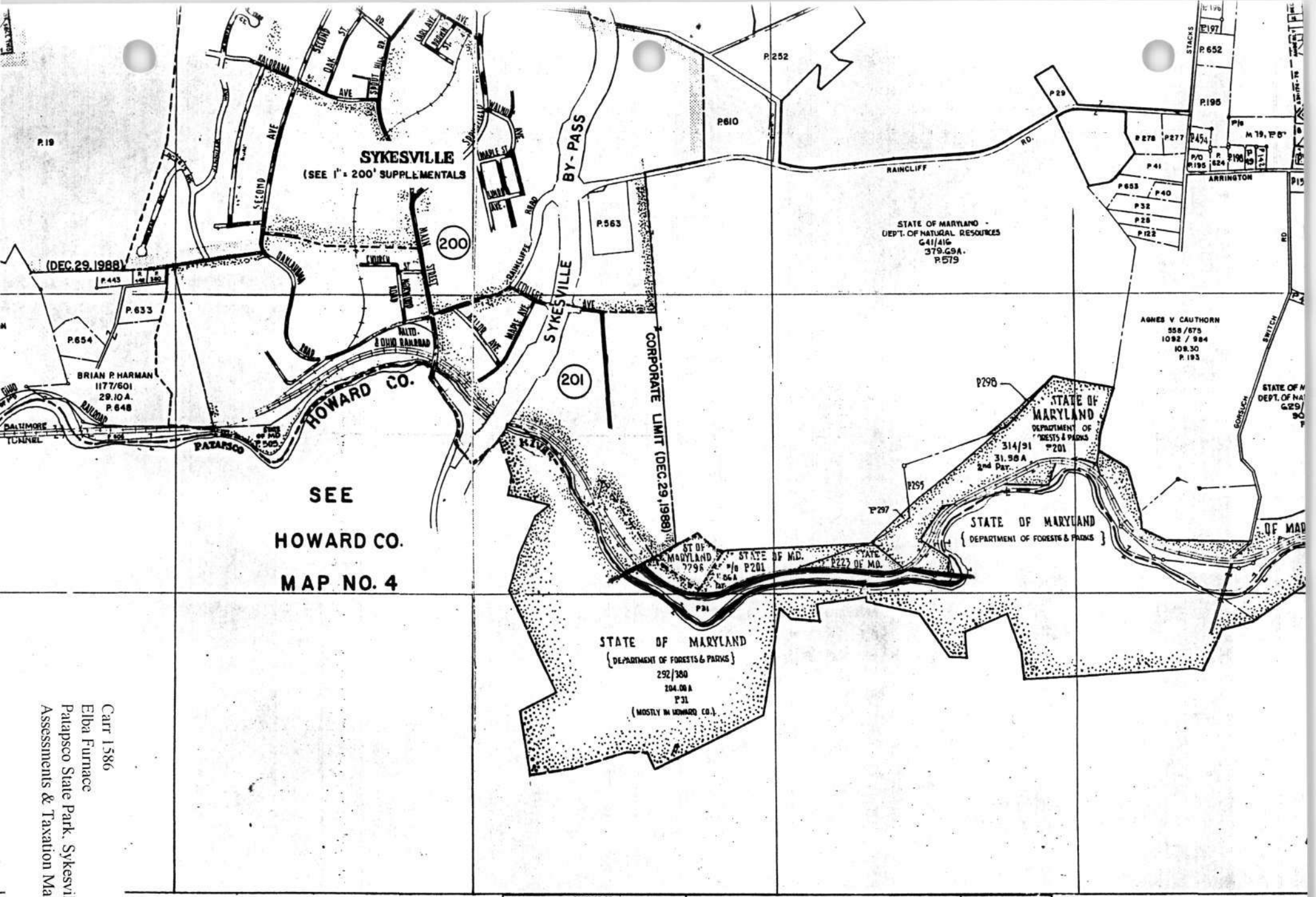
Geographic Organization:
Piedmont

Chronological/Developmental Periods:
Agricultural-Industrial Transition A.D. 1815-1870

Historic Period Themes:
Industry

Resource Type:
Iron Furnace

Notes compiled by Harold B. Johnsson, III, March 1997.
Maryland Geological Survey, Iron Ores of Maryland, 1911, pp. 149-150.
Healan Barrow, Sykesville Past and Present (Sykesville: Greenburg Pub. Co., 1987), p.6.



COMPILED BY
DEPT. OF ASSESSMENTS & TAXATION
PROPERTY MAP DIVISION

THE INFORMATION SHOWN HEREON HAS BEEN COMPILED FROM DEED DESCRIPTIONS AND IS NOT AN ACTUAL SURVEY. IT SHOULD NOT BE USED FOR LEGAL DESCRIPTIONS. USERS NOTING ERRORS ARE URGED TO NOTIFY DEPARTMENT OF ASSESSMENT & TAXATION

PROPERTY LINE
SUB-DIVISION BOUNDARY
CONTINUING OWNERSHIP - Z I E —Z— ÷ L Z
PARCEL NUMBER - P 119 (ASSIGNED TO IDENTIFY AND INDEX OWNERSHIP MUST BE PRECEEDED BY MAP NUMBER)

SCALE: 1" = 600'

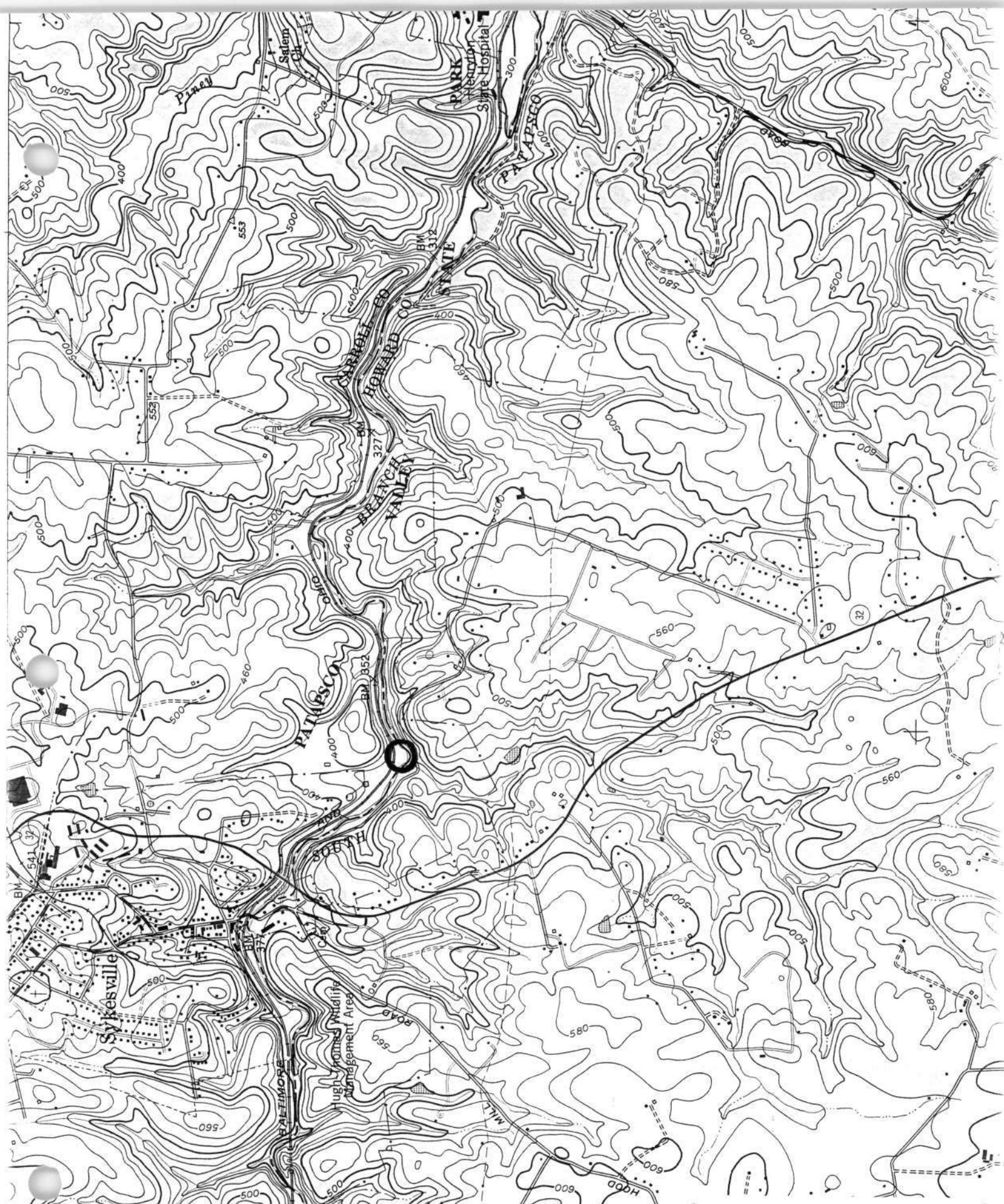
SCALE IN FEET
600 0 600 1200

REVISED TO	DATE	LIBER
	JUNE '91	1274

BY	LAST P NO	PHOTO	QUADRANGLE
M.M.M.	654	379/43-379/67 379/41-379/69	

Carr 1586
Elba Furnace
Patapsco State Park, Sykesville
Assessments & Taxation Map , Parcel

Carr 1586
Elba Furnace
Patapsco State Park, Sykesville
Martenet Map, 1862



Carr 1586
Elba Furnace
Patapsco State Park. Sykesville
[USGS]

Carr-1586

Elba Furnace
Patapsco State Park
Carroll County, Maryland

Photo: Kenneth M. Short
Date: Mar. 97
Neg. Loc.: Maryland Historical Trust
SE Elevation

1 OF 7

Carr-1586

Elba Furnace
Patapsco State Park
Carroll County, Maryland

Photo: Kenneth M. Short
Date: Mar. 97
Neg. Loc: Maryland Historical Trust
Retaining Wall - V.W. Elevation

2 OF 7

Carr-158b

Elba Furnace
Patapsco State Park
Carroll County, Maryland

Photo: Kenneth M. Short
Date: Mar. 97
Neg. Loc.: Maryland Historical Trust
NW Elevation from West

3 OF 7

Carr 1586

Elba Furnace
Patapsco State Park
Carroll County, Maryland

Photo: Kenneth M Short
Date: Mar 97
Neg Loc: Maryland Historical Trust
S.W Elevation

4 OF 7

Carr-1586

Elba Furnace
Patapsco State Park
Carroll County, Maryland

Photo: Kenneth M. Short
Date: Mar. 97
Neg. Loc. Maryland Historical Trust
View from interior looking N.W.

5 OF 7

Carr-1586

Elba Furnace
Patapsco State Park
Carroll County, Maryland

Photo: Kenneth M. Short
Date: Mar. 97
Neg. Loc: Maryland Historical Trust
SE Elevation - detail of corbelled opening

6 OF 7

Carr-1586

Elba Furnace
Patapsco State Park
Carroll County, Maryland

Photo: Kenneth M Short
Date: Mar. 97
Neg. Loc: Maryland Historical Trust
NE & SE Elevations

7 OF 7

presumed ruin of Elba Furnace Carroll County APR 11 1982
photo by J McGrain

CARR-1556

presumed ruin of Elba Furnace Carroll County Apr 11 1982
photo by J McGrain

CARR-1586